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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/090,035 06/10/98 HAUPT

M PHD97-074

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LM02/0203

EXAMINER

KUPSTAS, T

ART UNIT

PAPER NUMBER

2754

DATE MAILED:

02/03/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/090,035

Applicant

Haupt et al

Examiner

Tod Kupstas

Group Art Unit

2754



☐ Responsive to communication(s) filed on \_\_\_\_\_

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-19 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-19 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 6, 8

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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## DETAILED ACTION

### *Specification*

1. The Specification is objected to because of the following: The specification lacks titled sections for the background, the drawings, and the detailed description.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 9, and 11, are rejected under 35 U.S.C. 102(b) as being anticipated by Shindo (GB 2296811).

As set forth in claim 1, Shindo discloses a changer apparatus for information discs, comprising a stacking unit for stacking at least two information discs in at least two stacking positions (elements 12), a read/write unit (17) for reading information stored on the information discs and/or writing information on the information discs in a play position, an eject position being provided in which an information disc can be removed from the apparatus (access position 23), characterized in that transport means have been provided for the transport of the information discs

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from the eject position into a loading position of the stacking unit along a curve-shaped loading path (see fig. 1).

As set forth in claim 2, Shindo discloses a changer apparatus characterized in that the play position has been provided between the eject position and the loading position (see fig. 1, a disk loaded directly for play would play the disk and could then store the disk within the tray apparatus, thereby effectively placing the play apparatus between the loading and ejecting positions).

As set forth in claim 3, Shindo discloses a changer apparatus characterized in that the play position is offset from the direct connecting line between the loading position and the eject position (see fig. 1).

As set forth in claim 4, Shindo discloses a changer apparatus characterized in that the play position is disposed on the loading path (see fig. 1, the loading path can be construed to mean from the disk player to the loading position).

As set forth in claim 5, Shindo discloses a changer apparatus characterized in that a first transport mechanism has been provided for the transport of the information discs between the eject position, the play position and the loading position, and a second transport mechanism has been provided for the transport of the information discs into the stacking positions of the stacking unit, the first transport mechanism being adapted to move the information discs in the loading plane and the second transport mechanism being adapted to move the information discs in a

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stacking direction oriented vertically with respect to the loading plane (pin 21 moves the stacking unit vertically).

As set forth in claim 6, a changer apparatus characterized in that the first transport mechanism comprises at least a first and a second guide for the disc edge of the information disc (tray mechanism), which guide is grooved and is movable in the loading plane, the second guide comprising at least one rotationally drivable transport wheel (disc tray driver 30).

As set forth in claim 9, Shindo discloses a changer apparatus characterized in that the read/write unit is movably supported on a chassis plate of the apparatus (disc play apparatus 17).

As set forth in claim 11, a changer apparatus characterized in that the read/write unit is movable into the play position in the vertical direction (see fig. 4).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7,8, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shindo (GB 2296811) in view of Umesaki (GB 0391424).

Shindo does not disclose the guide mechanism as claimed, however an analogous guide mechanism is employed, including a first passive guide and the third guide. In particular the usage

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of guide arms is not employed. As set forth in claims 7 and 12, it would have been obvious to have utilized arm guides for the transport of the disk. Umesaki discloses the usage of guide arms in the loading of the disk. It would have been obvious to one of ordinary skill in the art to have provided guide arms for the loading of disks, as taught by Umesaki, to the disk player as taught by Shindo. The rationale is as follows: It would have been desirable to have provided means for guiding the disk. As Umesaki teaches the desirability of using arms, one of ordinary skill would have been motivated by Umesaki's teaching to have provided arms to the disk player, as taught by Shindo, thereby having provided art equivalent means for guiding the disk into the reproduction and loading positions.

As set forth in claim 8, Shindo discloses a changer apparatus characterized in that the first and third guide are mounted on a common pivot (see fig. 1, the pivot of the structure).

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shindo in view of Nakamichi et al (US 5,508,994).

As set forth in claim 10, Shindo discloses a changer apparatus characterized in that it has a read/write unit (17). Shindo does not explicitly disclose related clampers and dampers. As set forth in claim 10, Nakamichi et al disclose a changer apparatus characterized in that the read/write unit comprises a base plate and a laser mounting plate, the base plate and the laser mounting plate are coupled by means of dampers, the base plate is slidably mounted on the chassis plate, and the laser mounting plate carries a clamping device for clamping the information in the play position and an optical unit for reading information stored on the information disc; see col. 7, lines 28-54.

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It would have been obvious to a person of ordinary skill in the art at the time this invention was made to have provided the disk player, as taught by Shindo, with the clampers and dampers, as taught by Nakamichi et al. The rationale is as follows: It would have been desirable to have provided means for reproducing the discs clearly. As Nakamichi et al teach the desirability of utilizing disk clampers and dampers, one of ordinary skill would have been motivated by Nakamichi et al's teaching to have provided the disk player, as taught by Shindo, with dampers and clampers, thereby having provided secure means for reproducing the disks. comprises a base plate and a laser mounting plate, the base plate and the laser mounting plate are coupled by means of dampers, the base plate is slidably mounted on the chassis plate, and the laser mounting plate carries a clamping device for clamping the information disc in the play position and an optical unit for reading information stored on the information disc.

7. Claims 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shindo in view of Clarion (Japanese document 6-13193).

As set forth in claims 13-17, Shindo does not disclose spindles. As set forth in claim 13, Clarion discloses screwthreads (element 4 and 5) wherein the holder compartments are movable into a vertical direction by rotation of the spindles, there have been provided an upper stacking zone and a lower stacking zone of the stacking unit for stacking the holder compartment the loading position has been provided in a central zone between the upper and the lower stacking zone, one of the holder compartments is each time movable into the loading position by rotation of the spindles, and the transport means are adapted to move the information disc from the holder

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compartment, which is in the loading position, into the play position and into the eject position. As set forth in claim 14, Clarion discloses a changer apparatus characterized in that in the axial direction of the spindles the central zone has spacing zones at both sides of the loading position, which spacing zones define an axial spacing between the holder compartment in its loading position and the axially adjacent holder compartments in their stacking positions; see fig. 5. As set forth in claim 15, Clarion discloses a changer apparatus characterized in that the average screwthread pitch of the spindles in the loading position is smaller than the average screwthread pitch in the upper and lower stacking zone; see fig. 5. As set forth in claim 16, Clarion discloses a changer apparatus characterized in that the screwthread pitch of the spindles in the loading position is essentially zero; see fig. 5. As set forth in claim 17, Clarion discloses a changer apparatus characterized in that the average screwthread pitch in the spacing zones is greater than the average screwthread pitch in the upper and the lower stacking zone; see fig. 5. It would have been obvious to a person of ordinary skill in the art at the time this invention was made to have provided the spindle mechanism for vertical movement, as taught by Clarion, with the disk player, as taught by Shindo. The rationale is as follows: it would have been desirable to have provided accurate and efficient means for raising the disc storage position. As Clarion teaches the desirability of using the spindle mechanism, one of ordinary skill would have been motivated by Clarion's teaching to have provided the disc player, as taught by Shindo, with the spindle mechanism, thereby having provided an efficient art alternative method of raising and manipulating the disk storage area.



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Official notice is taken regarding claim 18, with regards to having a lower and an upper guide pin for guiding the information discs into the holder compartments of the stacking unit, which guide pins are engageable into the center holes of the information discs from above and from below respectively. It would have been obvious to a person of ordinary skill in the art at the time this invention was made to have provided the disk player, as taught by Shindo, with guide pins. The rationale is as follows: It would have been desirable to have provided means for securing the disks in their respective holders. As the utilization of guide pins for securing disks is of old and notorious use in the art. One of ordinary skill in the art would have been motivated to have provided the guide pins in the disk player as taught by Shindo, thereby providing secure means for containing the disks within their respective compartments.

Official notice is taken regarding claim 19, with regards to a motor vehicle including a changer apparatus. It would have been obvious to a person of ordinary skill in the art at the time this invention was made to have provided a car with a disk player. Placing a disk player in an automobile is old in notorious in the art. The rationale is as follows: It would have been desirable to have installed the disk player in places commonly used by people. One of ordinary skill would have been motivated to have installed the disk player, as taught by Shindo, in a car, thereby having expanded the potential market for the disk player.

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*Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ogawa (US 5,561,657) discloses a magazine for read/write disks and method and device for reading and writing of said read/write disks.

Nakamich (US 5,862,109) disclose a changer-type disc playback device.


Inatani et al (US 5,970,041) disclose a disc changer device increasing the distance between a gripped disc and neighboring discs on both sides of the gripped disc.

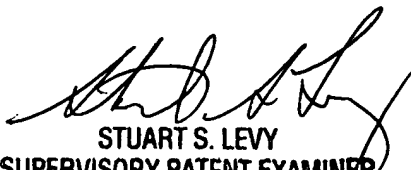
Tanaka et al (US 5,726,967) discloses a disk playback apparatus comprising a stocker.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tod Kupstas whose telephone number is (703) 305-2655.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stuart S. Levy, can be reached on (703) 308-1295. The fax phone number for this art unit is (703) 308-7201. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology center receptionist whose telephone number is (703) 305-3900.

Tod Kupstas

  
Jan. 12, 2000

  
STUART S. LEVY  
SUPERVISORY PATENT EXAMINER  
GROUP 2700